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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,616	05/25/2000	Klemens Sensen	P65350US0	6527

136 7590 03/20/2002

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EXAMINER
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LEYSON, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

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DATE MAILED: 03/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/577,616

Applicant(s)

SENSEN ET AL.

Examiner

Joseph Leyson

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the disclosure should include the subject matter of claims 6 and 9 which subject matter is clearly shown in the instant figures.

2. Claims 1-4 are objected to because of the following informalities: "cental" in line 2 of claim 1 should be changed to --central-- for proper spelling. Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is incorrect because the truncated channels (which include the annular slits which empty into the outer limiting wall) can only be formed between the external shells, because the truncated channels (which include the annular slits which empty into the inside wall) can only be formed between the

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internal shells and because the slits feed polymer melts, not just a polymer melt (i.e., lines 3-4). In claim 3, "said internal and external annular slits" lack antecedent basis. The examiner suggests the following changes in claim 1. In claim 1, line 3, "--external--" should be inserted after "empty"; line 4, "a polymer melt" should be changed to "--polymer melts--"; line 5, "internal and" should be deleted; line 6, "said" (first occurrence) should be changed to "--and internal--", and "said" (second occurrence) should be deleted; line 7, "also" should be changed to "--which--"; line 8, "--internal--" should be inserted after "said"; and line 9, "and external" should be deleted.

In claim 5, lines 8-9, "said inside and outside walls" should be changed to "--said inner and outer walls--" for antecedent basis clarity.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (-776).

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Yamada et al. (-776: fig. 4) teach an apparatus, that corresponds to the instant apparatus, which includes an extruder die head including a central annular channel, which is provided with an annular outlet die 7 and into whose outer limiting wall empty external annular slits (see fig. 4), which external annular slits feed polymer melts and constitute the smaller diameter openings of external truncated channels (channels 5 external to the central annular channel), formed between the external shells of stacked, conical insert members (see stacked members in fig. 4, note that the members have conical surfaces to define external truncated conical annular flow channels), and internal annular slits, feeding the polymer melts, which empty into an inside wall of the central annular channel, the internal annular slits forming the smaller diameter openings of internal truncated channels (channels 5 internal to the central annular channel), formed between the internal shells of stacked conical insert members (see stacked members in fig. 4, note that the members have conical surfaces to define internal truncated conical annular flow channels), the internal and external truncated conical annular channels communicating with the central annular channel to cause polymer melt in the truncated conical annular channels to empty through the outer limiting and inside walls of the central annular channel onto polymer melt in

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the central annular channel to produce multilayered tubes. As shown in fig. 4, the internal and external conical channels slope in opposite directions at approximately the same angle to the central annular channel, the internal and external conical channels communicate with the central annular channel in approximately the same radial plane (i.e., the annular slits lie in the same radial planes), and the internal and external conical channels are substantially concentrically spaced around the central annular channel. In the internal and external shells of the conical insert members, there are two or more counter rotating spiral (or oppositely spiraled) channels 5 whose depth tapers off in the direction of the opening (see fig. 2; col. 2, lines 43, to col. 3, line 11).

7. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the internal and external shells of the stacked, conical insert members having truncated conical channels and forming small diameter opening annular slits for emptying polymer melts into the inside and outside walls of the central annular channel for producing multilayered tubes, as recited by instant claims 1 and 5 are not found in the prior art. The examiner respectfully disagrees because such features

are found in the prior art as mentioned, in the prior art rejections above. Note that channels 5 of Yamada et al. (-776) includes conical portions which define truncated conical annular channels and that conical insert member is defined by the instant specification as an insert member with some conical portion.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (703) 308-2647. The examiner can normally be reached on M-F(8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (703) 308-3322. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
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March 19, 2002

  
TIM HEITBRINK  
PRIMARY EXAMINER  
GROUP 130

3-19-02